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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/198,590	11/23/1998	SUNIL KUMAR CHANDRUPATLA	CISCO-0610	2698

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SAN JOSE, CA 95164-0640

EXAMINER
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NGUYEN, NGA B

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/198,590	<b>Applicant(s)</b> CHANDRUPATLA ET AL.	
	<b>Examiner</b> Nga B. Nguyen	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15, 16, 18 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15, 16, 18 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to the Amendment filed on June 4, 2002, which paper has been placed of record in the file.
2. Claims 1-13, 15, 16, 18, and 23 are pending in this application.

### ***Response to Arguments/Amendment***

3. Applicant's arguments with respect to claims 1-13, 15, 16, 18, and 23 have been considered but are not persuasive.

In the arguments, applicant states that Sawyer does not disclose obtaining account start-stop event data from an accounting server, Sawyer does not care about the length of the call because billing is made by bandwidth, examiner respectfully disagrees. In Sawyer, billing center 44 performs the traditional accounting server function, thus *billing center 44 is equivalent to accounting server*. Sawyer teaches the determined charging amount is calculated by multiplying the derived total bandwidth usage amount by a charging rate, the determined charging amount reported to the billing center 44 (see column 5, lines 23-28). The billing center 44 adds the additional charges such as a flat fee, a time-based fee, long distance call to the determined charging amount to provide a total charge for the communication or call (column 6, lines 1-5). Thus, in case the additional charge is a time-based fee, in order to calculate the time base fee, it is inherit that the billing center 44 must have the length of the call because it is obvious that the time based-fee is calculated by multiply the length of the call (time duration) by a charge rate. Therefore, billing center 44 not only calculates

billing made by bandwidth, but also calculates billing made by the length of the call (time-based fee). Moreover, the Mobil Switching Center (MSC) 30 maintains record of those cellular telephone calls originated by or terminated (start-stop event) at the mobile station 28, the MSC 30 also connected to the billing center 44 (see figure 2). Thus it is inherent that the billing center 44 must obtain account start-stop event data from the MSC 30 in order to calculate the time-based fee. Therefore, Sawyer does teach obtaining accounting start-stop event data from an accounting server.

In regard to the previous element regarding accounting start-stop data, it is clear that the billing center 44 is the accounting sever, the bandwidth use monitoring device 40 (BUMD) measure the bandwidth, thus the BUMD 40 is equivalent to the intermediate netflow collector in the present claimed invention. Moreover, Sawyer teaches obtaining account start-stop event data from the billing center 44, obtaining amount bandwidth from the BUMD 40, thus the amount of bandwidth is obtained independent from accounting start-stop even data.

In conclusion, for the reason set forth above, examiner decides to maintain the previous rejection (also see details below) and make this office action FINAL.

4. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6, 9-10, 13, 15, 18, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Sawyer, U.S. Patent No. 5,828,737.

Regarding to claim 1, Sawyer discloses a method for accounting for network usage comprising:

obtaining accounting start-stop event data from an accounting server (column 5, lines 16-17; column 6, lines 45-47; figure 4; call start, call over; the processing device 42 associated with billing center 44 keeps connect/disconnect events);

obtaining network flow data independent from the accounting start-stop event data from a router within a network through an intermediary netflow collector, the network flow data including data regarding the number and type of packets utilized by user (column 3, lines 61-63; column 4, lines 51-67; the bandwidth data (i.e., amount of

data packets transferred over the network) is collected by the a bandwidth use monitoring device (BUMD) 40); and

correlating the accounting start-stop event data and the network flow data into a subscriber specific call detail record unique to the user by matching the accounting start-stop event data associated with the user with the network flow data associated with the user (column 4, line 59-column 5, line 55; the proper connect/disconnect information is combined with its bandwidth information to determine a charging amount to be billed for each call, and is sent to the billing center to generate a bill for the usage, "subscriber specific call detail record" is nothing more the user's usage record to generate the bill).

Regarding to claim 2, Sawyer discloses wherein the obtaining accounting start-stop event data further comprises: parsing the accounting start-sop event data from the accounting server on a prescribed time interval; and publishing the accounting start-stop event data on an information bus (column 5, lines 16-17; column 6, lines 45-47; figure 4; call start, call over; the processing device 42 associated with billing center 44 keeps connect/disconnect events).

Regarding to claims 3-4, Sawyer discloses wherein the obtaining accounting start-stop event data further comprises: collecting the accounting start-stop event data at a target device that subscribes to the accounting start-stop event data (column 5, lines 15-16 and column 6, lines 7-60; the connect/disconnect events is collected by the processing device 42 associated with the billing center 44).

Regarding to claim 5, Sawyer discloses wherein the obtaining network flow data further comprises: aggregating the network flow data at the network flow collector

according to a service provider defined aggregation scheme (column 4, lines 50-67; the bandwidth data is collected by the BUMD 40).

Regarding to claim 6, Sawyer discloses wherein aggregating the network flow data further comprises: basing aggregation of the network flow data on a specified time period (column 6, lines 7-60).

Regarding to claims 9, 11, Sawyer discloses wherein the obtaining network flow data further comprises: filtering the network flow data at the network flow collector according to a service provider defined filtration scheme (column 4, lines 57-59 and column 5, lines 12-15; the measurements of bandwidth data may be made by the BUMD 40 on either or both the reverse and/or the forward portions of the communications link 18).

Regarding to claim 10, Sawyer discloses wherein the obtaining network flow data further comprises: collecting the network flow data from a router and forwarding the network flow data to the network flow collector; aggregating the network flow data according to a defined aggregation scheme; parsing the network flow data from the network flow collector (column 4, lines 51-67; the measurements of bandwidth data may be made by the BUMD 40 on either or both the reverse and/or the forward portions of the communications link 18; the BUMD 40 and processing device 42 function as a bandwidth meter 46 measuring the total amount of bandwidth used for each communication).

Regarding to claim 13, Sawyer discloses a method for accounting for network usage comprising:

parsing accounting start-stop event data from an accounting server on a prescribed time interval (column 5, lines 16-17; column 6, lines 45-47; figure 4; call start, call over; the processing device 42 associated with billing center 44 keeps connect/disconnect events);

publishing the accounting start-stop event data on an information bus (column 5, lines 12-15);

collecting network flow data independent from the accounting start-stop event data from a router within a network through an intermediary netflow collector, the network flow data including data regarding the number and type of packets utilized by user (column 3, lines 61-63; column 4, lines 51-67; the bandwidth data (i.e., amount of data packets transferred over the network) is collected by the a bandwidth user monitoring device (UBMD) 40);

aggregating the network flow data according to a prescribed aggregation scheme (column 4, lines 57-60);

parsing the network flow data from the network flow collector (column 4, lines 60-67);

publishing the network flow data on an information bus (column 5, lines 10-15);

collecting the accounting start-stop event data and network flow data at a target device that subscribed to the accounting start-stop event data and the network flow data (column 5, lines 29-55; the connect/disconnect events and bandwidth data are collected by the processing device 42 associated with the billing center 44); and



correlating the accounting start-stop event data and the network flow data into a subscriber specific call detail record unique to the user by matching the accounting start-stop event data associated with the user with the network flow data associated with the user (column 4, line 59-column 5, line 55; the proper connect/disconnect information is combined with its bandwidth information to determine a charging amount to be billed for each call, and is sent to the billing center to generate a bill for the usage, "subscriber specific call detail record" is nothing more the user's usage record to generate the bill).

Claims 15, 16, 18 are written in means that parallel the limitations found in claims 1, 13 above, therefore, are rejected by the same rationale.

Claim 23 is written in computer software that parallel the limitations found in claim 1 above, therefore, is rejected by the same rationale.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7, 8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer, U.S. Patent No. 5,828,737.

Regarding to claims 7-8, Sawyer does not disclose basing aggregation of the network flow data on the Internet Protocol Layer 3 source address and the Internet

Protocol Layer 4 destination address. However, basing aggregation of the network flow data on the Internet Protocol Layer 3 source address and the Internet Protocol Layer 4 destination address is well-known in the art of data communication using Internet Protocol. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to include the feature above with Sawyer's for the purpose of applying the measurements of bandwidth data on the Internet Protocol Layer 3 source address and the Internet Protocol Layer 4 destination address.

Regarding to claim 12, Sawyer does not disclose wherein correlating and accounting start-stop event data and the network flow data further comprises: reformatting the call detail record to meet post-correlated applications. However, reformatting the call detail record to meet a compatible software application is well-known in the art. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to include the feature above with Sawyer's for the billing purpose.

### ***Conclusion***

9. Claims **1-13, 15, 16, 18, and 23** are rejected.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (703) 306-2901. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (703) 308-0505.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-1113.

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
C/o Technology Center 3600  
Washington, DC 20231

Or faxed to:

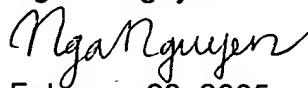
(703) 872-9326 (for formal communication intended for entry),

or

(703) 308-3691 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, Seventh Floor (Receptionist).

Nga B. Nguyen

  
February 23, 2005